



**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 1 -- Catchment Information**

Subwatershed: Bear Branch

Location of Catchment Centroid on ADC Map: Year: 2001 Page: 4 Grid: E6

State Plane Coordinates of Outfall Location: X: 1351552 Y: 518515

Closest Road Intersection to Outfall: Laurel Place and Catalpa Street

Outfall SDI ID or Outfall Description: System 85046A, SDI 54568; outfalls to Laurel Lakes

Objective: Demonstration / Impairment(s) (Sheet 1) Demonstration, Water Quality

Drainage Area (ac): 25.3 Impervious Area (ac): 20.2

Percent Impervious: 80% Soil Recharge Factor (S): 0.13

WQ<sub>v</sub> (required): 1.624 Re<sub>v</sub> (required): 0.211

Predominant Land Use: commercial Mean Depth to Ground Water: 1-2 ft

Sanitary System:  Septic  Municipal Sewer Water Supply:  On Site Well  Public Water

**Storm Drainage System Within Catchment**

Piped: 100% Open Channels: 0%

Area Drained by System: 100%

Location in Catchment:  Headwaters  Middle  Lower  All

Open Channel Lining- Vegetation: 0% Riprap: 0% Concrete: 0% Other: 0%

**Existing IMP(s) / BMP(s)**

SDI ID: 85127A Type (number from Sheets 4 & 5): 16 Age: 17

Closest Road Intersection to IMP / BMP: Laurel Place and Cherry Lane

Catchment Area Treated (ac) : 9.82 Percentage Catchment Treated: 39%

WQ<sub>v</sub> Provided:  YES  NO Re<sub>v</sub> Provided:  YES  NO C<sub>p</sub> Provided:  YES  NO

SDI ID: \_\_\_\_\_ Type (number from Sheets 4 & 5): \_\_\_\_\_ Age: \_\_\_\_\_

Closest Road Intersection to IMP / BMP: \_\_\_\_\_

Catchment Area Treated (ac) : \_\_\_\_\_ Percentage Catchment Treated: \_\_\_\_\_

WQ<sub>v</sub> Provided:  YES  NO Re<sub>v</sub> Provided:  YES  NO C<sub>p</sub> Provided:  YES  NO

SDI ID: \_\_\_\_\_ Type (number from Sheets 4 & 5): \_\_\_\_\_ Age: \_\_\_\_\_

Closest Road Intersection to IMP / BMP: \_\_\_\_\_

Catchment Area Treated (ac) : \_\_\_\_\_ Percentage Catchment Treated: \_\_\_\_\_

WQ<sub>v</sub> Provided:  YES  NO Re<sub>v</sub> Provided:  YES  NO C<sub>p</sub> Provided:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 1 -- Catchment Information (concluded)**

<b>CATCHMENT SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.64</u>	Re <sub>v</sub> (provided) :	<u>0.09</u>
Area Treated (ac):	<u>9.82</u>	Impervious Area Treated (ac):	<u>8.03</u>
Area Treated (%):	<u>39%</u>	Impervious Area Treated (%):	<u>40%</u>

**Comments**

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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 2 -- Site Information**

Site Name: Lowes Home Improvement Center Address: 14398 Baltimore Avenue

Site Owner: Laurel Lakes LLC

State Plane Coordinates of Site Centroid: X: 1351302 Y: 517018 Date: 3/25/03

Personnel: PM Weather: sunny, 65F deg

Area (ac): 23.9 Impervious Area (ac): 21

Percent Impervious: 88% Soil Recharge Factor (S): 0.13

WQ<sub>v</sub> (required): 1.68 Re<sub>v</sub> (required): 0.22

Property Area (ac): 25.3 Property Area Included in Site: 94%

Amount of Catchment Occupied by Site: 94%

**Storm Drainage System Within Site**

Piped: 100% Open Channels: 0% Area Drained by System: 100%

Open Channel Lining - Vegetation: 0% Riprap: 0% Concrete: 0% Other: 0%

**Existing IMP(s) / BMP(s)** (Identified on Page 1, FORM 1, Catchment Information)

SDI ID: \_\_\_\_\_ Condition:  Excellent  Good  Average  Fair  Poor

SDI ID: \_\_\_\_\_ Condition:  Excellent  Good  Average  Fair  Poor

SDI ID: \_\_\_\_\_ Condition:  Excellent  Good  Average  Fair  Poor

**Site Information**

Type of Pavement:  Bituminous  Concrete  Gravel  Grid Pavers  Other \_\_\_\_\_

Pavement Condition:  Excellent  Good  Average  Fair  Poor

Underdrains can be easily directed to existing storm drains or daylighted:  YES  NO

Gutter/Exterior Downspouts Present:  YES  NO

Roof Connected Directly to Storm Drain:  YES  NO

Roof Drains onto Impervious Surface:  YES  NO

Obvious Existing Drainage Problems:  Extensive  Moderate  Average  Limited  None

Steep Slopes Present:  Extensive  Moderate  Average  Limited  None

Existing Landscaping:  Extensive  Moderate  Average  Limited  None

Mature / Specimen Trees:  Extensive  Moderate  Average  Limited  None

Area Available for Aboveground BMPs:  Extensive  Moderate  Average  Limited  None

Existing Cover of Potential Aboveground BMP Locations:  Grass  Landscaped  Gravel  Other Pervious  
 Pavement  Other Impervious

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 2 -- Site Information (concluded)**

**Commercial / Institutional**

Islands Present:  YES  NO

Curb Present Around Island:  YES  NO

Ground Level of Island Relative to Pavement:  Above  Equal  Below

Island Landscaping:  Impervious  Bare Earth  Gravel  Grass  Mulch  Herbaceous Plants  Shrubs  
 Trees (<2 in. DBH)  Trees (2 - 6 in. DBH)  Trees (>6 in. DBH)

Trees have sufficient spacing to allow IMPs  YES  NO

Parking area that can be directed to potential treatment area with little grading: 90%

SITE SUMMARY			
WQ <sub>v</sub> (provided) :	<u>0.64</u>	Re <sub>v</sub> (provided):	<u>0.09</u>
Area Treated (ac) :	<u>9.82</u>	Impervious Area Treated (ac):	<u>8.03</u>
Area Treated (%) :	<u>39</u>	Impervious Area Treated (%):	<u>40</u>

**Photographs**

- No. 414 Description: looking south at west (back) side of building
- No. 415 Description: looking east at north side of building
- No. 416 Description: looking north at east (front) side of building
- No. 417 Description: looking south at east (front) side of building
- No. 418 Description: looking west at north side of building
- No. 419 Description: looking north at west (back) side of building
- No. \_\_\_\_\_ Description: \_\_\_\_\_

**Comments** Pavement on site is 95% bituminous and 5% concrete.  
Aerial photograph is out of date and no longer accurate. Building footprint has changed.  
Pavement affected by construction is new. Older pavement still exists. New site information is needed. Storm drain system has been modified.

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 2 -- Site Information**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 7

State Plane Coordinates of IMP / BMP Centroid: X: \_\_\_\_\_ Y: \_\_\_\_\_

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 4, 7, 16

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 3.92 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>	
WQ <sub>v</sub> (provided): <u>Undetermined</u>	Re <sub>v</sub> (provided): <u>0.000</u>
Area Treated (ac): <u>3.92</u>	Impervious Area Treated (ac): <u>3.92</u>

**Photographs**

No. <u>871</u>	Description: <u>looking north at front of building</u>
No. <u>872</u>	Description: <u>looking northeast at back of building</u>
No. _____	Description: _____

**Comments** Roof drains have downspouts that connect directly to storm drain. Connection could be broken.

IMP area = 170,750 sq ft

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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 39

State Plane Coordinates of IMP / BMP Centroid: X: \_\_\_\_\_ Y: \_\_\_\_\_

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.92 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.067</u>	Re <sub>v</sub> (provided):	<u>0.009</u>
Area Treated (ac):	<u>0.92</u>	Impervious Area Treated (ac):	<u>0.85</u>

**Photographs**

No. <u>873</u>	Description: <u>looking east</u>
No. <u>874</u>	Description: <u>looking west</u>
No. _____	Description: _____

**Comments**

IMP area = 5,931 sq ft

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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 39

State Plane Coordinates of IMP / BMP Centroid: X: \_\_\_\_\_ Y: \_\_\_\_\_

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.49 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.033</u>	Re <sub>v</sub> (provided):	<u>0.004</u>
Area Treated (ac):	<u>0.49</u>	Impervious Area Treated (ac):	<u>0.42</u>

**Photographs**

No. <u>875</u>	Description: <u>looking west</u>
No. <u>876</u>	Description: <u>looking east</u>
No. _____	Description: _____

**Comments** IMP treats 99% of the drainage area  
IMP size = 2,871 sq ft  
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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 39

State Plane Coordinates of IMP / BMP Centroid: X: \_\_\_\_\_ Y: \_\_\_\_\_

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.94 ac 100%

**Retrofit of Existing SWM BMP**

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.069</u>	Re <sub>v</sub> (provided):	<u>0.009</u>
Area Treated (ac):	<u>0.94</u>	Impervious Area Treated (ac):	<u>0.87</u>

**Photographs**

No. <u>877</u>	Description: <u>looking south</u>
No. <u>878</u>	Description: <u>looking north</u>
No. _____	Description: _____

**Comments**

IMP size = 6,032 sq ft

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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 39

State Plane Coordinates of IMP / BMP Centroid: X: \_\_\_\_\_ Y: \_\_\_\_\_

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.71 ac 100%

**Retrofit of Existing SWM BMP**

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.052</u>	Re <sub>v</sub> (provided):	<u>0.007</u>
Area Treated (ac):	<u>0.71</u>	Impervious Area Treated (ac):	<u>0.66</u>

**Photographs**

No. <u>879</u>	Description: <u>looking south</u>
No. <u>880</u>	Description: <u>looking east</u>
No. _____	Description: _____

**Comments**

IMP size = 4,765 sq ft

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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 39

State Plane Coordinates of IMP / BMP Centroid: X: \_\_\_\_\_ Y: \_\_\_\_\_

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.69 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.043</u>	Re <sub>v</sub> (provided):	<u>0.006</u>
Area Treated (ac):	<u>0.69</u>	Impervious Area Treated (ac):	<u>0.54</u>

**Photographs**

No. <u>881</u>	Description: <u>looking west</u>
No. <u>882</u>	Description: <u>looking north</u>
No. _____	Description: _____

**Comments** IMP treats 99% of the drainage area  
IMP size = 3,717 sq ft  
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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 39

State Plane Coordinates of IMP / BMP Centroid: X: \_\_\_\_\_ Y: \_\_\_\_\_

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.70 ac 100%

**Retrofit of Existing SWM BMP**

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO



**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



883



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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 39

State Plane Coordinates of IMP / BMP Centroid: X: \_\_\_\_\_ Y: \_\_\_\_\_

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: \_\_\_\_\_ ac 100%

**Retrofit of Existing SWM BMP**

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.038</u>	Re <sub>v</sub> (provided):	<u>0.005</u>
Area Treated (ac):	<u>0.78</u>	Impervious Area Treated (ac):	<u>0.47</u>

**Photographs**

No. <u>885</u>	Description: <u>looking west</u>
No. <u>886</u>	Description: <u>looking north</u>
No. _____	Description: _____

**Comments**

IMP size = 4,310 sq ft

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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



885



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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 39

State Plane Coordinates of IMP / BMP Centroid: X: \_\_\_\_\_ Y: \_\_\_\_\_

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: \_\_\_\_\_ ac 100%

**Retrofit of Existing SWM BMP**

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.086</u>	Re <sub>v</sub> (provided):	<u>0.011</u>
Area Treated (ac):	<u>1.34</u>	Impervious Area Treated (ac):	<u>1.08</u>

**Photographs**

No. <u>887</u>	Description: <u>looking west</u>
No. <u>888</u>	Description: <u>looking north</u>
No. _____	Description: _____

**Comments**

IMP size = 8,203 sq ft

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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 5

State Plane Coordinates of IMP / BMP Centroid: X: \_\_\_\_\_ Y: \_\_\_\_\_

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 7, 16

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: \_\_\_\_\_ ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO



**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 38

State Plane Coordinates of IMP / BMP Centroid: X: \_\_\_\_\_ Y: \_\_\_\_\_

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.19 ac 100%

**Retrofit of Existing SWM BMP**

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO



**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 38

State Plane Coordinates of IMP / BMP Centroid: X: \_\_\_\_\_ Y: \_\_\_\_\_

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.28 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO



**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 41

State Plane Coordinates of IMP / BMP Centroid: X: \_\_\_\_\_ Y: \_\_\_\_\_

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 4

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.11 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO



**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 38

State Plane Coordinates of IMP / BMP Centroid: X: \_\_\_\_\_ Y: \_\_\_\_\_

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.08 ac 95%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.006</u>	Re <sub>v</sub> (provided):	<u>0.000</u>
Area Treated (ac):	<u>0.09</u>	Impervious Area Treated (ac):	<u>0.07</u>

**Photographs**

No. <u>896</u>	Description: <u>looking north</u>
No. <u>897</u>	Description: <u>looking south</u>
No. _____	Description: _____

**Comments** A speed bump will be used to direct flow. Runoff can be treated within existing grassed areas. If additional treatment area is needed, pavement can be removed and replaced with bioretention area.  
IMP treats 89% of the drainage area  
IMP size = 4,426 sq ft  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 38

State Plane Coordinates of IMP / BMP Centroid: X: \_\_\_\_\_ Y: \_\_\_\_\_

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: \_\_\_\_\_ ac 95%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.024</u>	Re <sub>v</sub> (provided):	<u>0.001</u>
Area Treated (ac):	<u>0.35</u>	Impervious Area Treated (ac):	<u>0.30</u>

**Photographs**

No. <u>898</u>	Description: <u>looking south</u>
No. <u>899</u>	Description: <u>looking west</u>
No. <u>900</u>	Description: <u>looking east</u>
No. <u>901</u>	Description: <u>looking north</u>
No. _____	Description: _____

**Comments** A speed bump will be used to direct flow. Runoff can be treated within existing grassed areas. If additional treatment area is needed, pavement can be removed and replaced with bioretention area.  
IMP treats 51% of the drainage area  
IMP size = 5,867 sq ft  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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